WATER SUPPLY OUTLOOK

KOOTENAI RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The snow pack is near record in the high elevations, above average in the median elevations and near to below average in the low elevations. The snow pack is quite dense for this early date which will help delay high elevation runoff.

Streamflow volume for the April through September period is forecast to be the second highest of record in the past 30 years in the main Kootenai where it enters Montana from British Columbia. Inflow from tributary streams in Montana is expected to be above average but not as high as main stem flows. This will help reduce the downstream flows. The runoff at Leonia is forecast about fifth highest of record. High flows can be expected along the Kootenai River but because the heavy snow pack is confined to the high elevations it is much more favorable than if the same volume runoff were to come from the valley and mid-elevation zones. Late season irrigation supplies are expected to be above average.

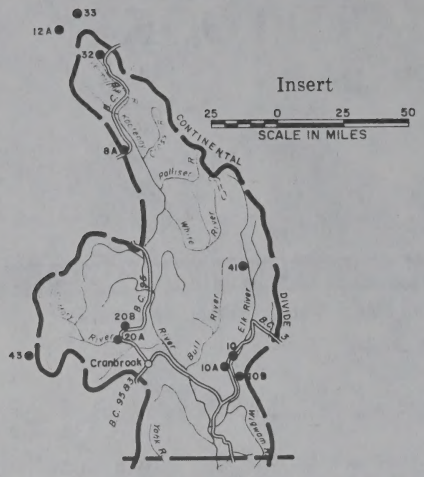
STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3020 FISHER RIVER NEAR JENNINGS				342	264	250	440	271	486	286	210	383	274	291	257	318	162	264	302	
STATION NO. 3030 KOOTENAI RIVER AT LIBBY	9630	5952	8416	9686	7268	7359	10425	7370	9664	6855	6431	9666	7384	8688	6644	8096	7058	7820	8043	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

KOOTENAI RIVER BASIN



LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary

See Insert

C A N A D A

I D A H O

L I N C O L N

L I N C O L N S. W. C. D.

F L A T H E A D

N

Yaak River

Yaak

U.S. 93

MONT. 37

RIVER

Rexford

Eureka

Tobacco River

Troy

Libby

Warland

KOOTENAI RIVER

Libby Creek

Wolf Creek

Happy Inn

U.S. 2

15A01

14A07

14A11

14A10

14A04

15A02

15B11

15B16

15B15

3013

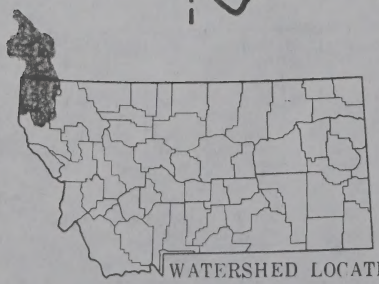
3050

3045

3030

3020

10 0 10
SCALE IN MILES



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 1

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
15B11	Baree Creek	5500	3/1	134	55.1	38.5	-
15B16	Baree Midway	4600	3/1	110	44.4	30.9	-
15B15	Baree Trail	3800	3/1	27	8.4	11.2	-
14A04	Brush Creek	5000	3/1	41	13.4	11.7	12.7*
BC 10	Fernie	3500	2/27	28	8.3	10.0	9.0
BC 12A	Field	4200	2/28	69	7.5	5.1	5.8
BC 11	Glacier	4100	2/26	100	37.5	28.0	24.0*
14A11	Graves Creek	4300	2/28	66	23.5	15.3	-
BC 43	Gray Creek	5100	2/26	67	16.7	15.4	16.7*
BC 33	Kicking Horse	5400	2/28	53	16.3	13.0E	13.3
BC 20B	Kimberley	3800	2/26	24	6.9	8.8	8.4
BC 32	Marble Canyon	5000	2/28	54	17.5	16.3	13.5
BC 10B	Morrissey Ridge	6100	3/1	96	38.0	27.5	-
BC 10A	New Fernie	4100	2/27	55	18.1	15.3	13.2*
15A01	Red Mountain	6000	2/27	60	23.9	17.8	18.0
BC 8A	Sinclair Pass	4500	2/28	28	8.4	6.6	5.8*
BC 20A	Sullivan Mine	5100	2/27	44	14.1	12.5	13.4
BC 41	Upper Elk River	4400	2/26	25	10.5	6.5	7.9
14A07	Weasel Divide	5450	2/28	111	46.0	28.3	30.4*

E - Estimated water content.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
15B15M	Baree Trail	3800	48	7.5	2/28	6.4	6.3	-
14A10M	Murphy Lake R.S.	3000	48	22.6	3/1	20.8	19.5	-
15A02M	Raven R.S.	3050	48	23.0	3/2	22.2	21.8	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 1

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	FISHER RIVER					
3020	Jennings (near)	Apr-Sept	345	108	247	318
	KOOTENAI RIVER					
3030	Libby (at)	Apr-Sept	9820	121	7929	8096
	YAAK RIVER					
3045	Troy (near)	Apr-Sept	640	115	564	555
	KOOTENAI RIVER					
3050	Leonia (at)	Apr-Sept	11020	118	9176	9327

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

FLATHEAD RIVER BASIN
MONTANA

as of
MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Data included in this report were obtained in cooperation with other Federal, State and private organizations

Snow pack is near record in the high elevations of the Mission and Whitefish ranges. High elevations in the Flathead River drainages are generally fifth to third highest of record. In the median elevations the snow pack is above average, while low elevations are near to a little below average. In all elevations the snow pack is quite dense for this time of the season and will help delay high elevation runoff.

Runoff during the April through September period is forecast third to fifth highest of record in the past 30 years on the three forks of the Flathead. The Swan River is forecast to produce second highest flow during this period. High flows can be expected along the Flathead and Swan Rivers, but having the heavy snow pack confined to the high elevations is much more favorable than if the same volume of runoff were to come from the valley and mid elevation zones. Streamflow is expected to be adequate well into the fall.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3630 FLATHEAD RIVER AT COLUMBIA FALLS	6837	5331	7749	7225	5732	6522	8267	5707	7164	5716	5053	8053	5888	6232	5978	6497	4937	7398	7418	
STATION NO. 3700 SWAN RIVER NEAR BIG FORK	841	514	807	686	619	604	676	570	750	575	568	997	724	707	771	694	533	706	844	

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"The Conservation of Water begins with the Snow Survey"

FLATHEAD LAKE RIVER BASIN

MT-2b

SNOW SURVEY DATA

WATERSHED 2

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13A15	Badger Pass	6900	3/5	110	42.5	28.7	-
14B03	Bassoo Peak	5150	2/27	34	11.2	10.8	11.1*
13A11	Beaver Lake	5900	3/5	71	25.2	17.5	-
13B03	Big Creek	6750	3/1	118	48.4	30.8	38.5
14A04	Brush Creek	5000	3/1	41	13.4	11.7	12.7*
13A17	Camp Misery	6400	3/3	137	59.7	35.2	33.0*
13B10	Coyote Hill	4200	3/2	38	12.0	8.4	10.2
13A02	Desert Mountain	5600	3/2	49	17.8	12.5	14.1*
13B04	Fatty Creek	5500	3/1	73	26.2	17.2	10.0*
BC 10	Fernie	3500	2/27	28	8.3	10.0	9.0
14A11	Graves Creek	4300	2/28	66	23.5	15.3	-
14A09	Griffin Creek Divide	5150	2/28	42	13.3	9.8	12.4*
13B12	Gunsight Lake	6300	3/5	129	51.8	32.5	-
14A03	Hell Roaring Divide	5770	3/3	94	38.7	25.8	26.8*
13B13	Holbrook	4530	2/27	40	12.9	7.9	10.2*
14A06	Kishenehn	3890	2/28	36	9.8	8.8	9.9
14A05	Logan Creek	4300	3/6	33	7.9	8.0	8.8*
13A05	Marias Pass	5250	2/23	67	21.3	15.8	17.3
13A16	Mineral Creek	4000	2/25	70	23.0	17.8	19.8
BC 10B	Morrissey Ridge	6100	3/1	96	38.0	27.5	-
BC 10A	New Fernie	4100	2/27	55	18.1	15.3	13.2*
13B07	North Fork Jocko	6330	3/2	132	49.8	33.8	39.8
13B02	Spotted Bear Mountain	7000	2/27	54	19.3	13.7	14.6
13C01	Stuart Mountain	7400	2/25	85	31.2	25.1	26.5*
13B01	Trinkus Lake	6100	2/27	128	48.1	32.6	36.3*
14B01	TV Mountain	6800	2/24	51	16.0	15.4	14.9*
13B11	Twin Creeks	3580	2/27	43	14.6	12.6	12.4*
13B05	Upper Holland Lake	7000	2/27	114	39.5	26.5	29.8*
14A07	Weasel Divide	5450	2/28	111	46.0	28.3	30.4*

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13A02M	Desert Mountain	5600	54	8.4	3/2	8.0	2.3	7.1
13A05M	Marias Pass	5250	54	6.5	2/28	5.5	5.3	5.3
14A10M	Murphy Lake	3000	48	22.6	3/1	20.8	19.5	-
13B19M	Seeley Lake	4030	48	11.9			9.9	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 2

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	NORTH FORK FLATHEAD RIVER					
3555	Columbia Falls (near)	Apr-Sept	2550	125	1878	2027
	MIDDLE FORK FLATHEAD RIVER					
3585	West Glacier (near)	Apr-Sept	2300	120	1755	1923
	SOUTH FORK FLATHEAD RIVER					
3625	Columbia Falls (near)(7)	Apr-Sept	2850	120	2004	2381
	FLATHEAD RIVER					
3630	Columbia Falls (at)(7)	Apr-Sept	7900	122	5670	6497
	SWAN RIVER					
3700	Big Fork (near)	Apr-Sept	850	122	594	694
	FLATHEAD RIVER					
3720	Polson (near)(8)	Apr-Sept	9400	121	6841	7778

(7) Adjusted for storage in Hungry Horse Reservoir.
(8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3620	Hungry Horse	3428.0	1746.0	2272.0	2436.3
3710	Flathead Lake	1791.0	1049.0	918.3	845.1
3756	Camas (4)	45.2	26.0	28.8	32.2
3801	Mission Valley (8)	100.3	25.1	60.1	34.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

LOWER CLARK FORK RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is generally near average except for record amounts in the higher elevations of the Mission Range. The snow pack is quite dense for this time of year and will delay high elevation runoff.

Tributary streams of the Clark Fork are forecast near to a little above average. Inflow from the Blackfoot River will be above average. The Flathead River is forecast to produce about third highest flow in the past 30 years and will raise flow in the Clark Fork below the junction with the Flathead River.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3405 CLARKS FORK RIVER ABOVE MISSOULA	2470	1590	2030	2369	1782	1887	1737	1590	2012	1577	1699	2044	1452	1250	1812	1838	1427	2130	2517	
STATION NO. 3895 THOMPSON RIVER NEAR THOMPSON FALLS									428	276	177	366	268	290	250	302	175	232	312	

Report prepared by

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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
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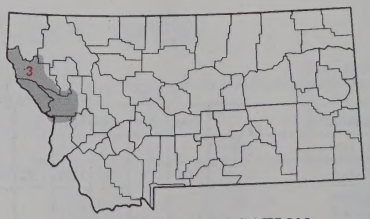
"The Conservation of Water begins with the Snow Survey"

LOWER CLARK FORK RIVER BASIN

LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 3

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13C16	Ambrose	6480	2/26	43	12.9	10.2	12.1*
15B11	Baree Creek	5500	3/1	134	55.1	38.5	-
15B16	Baree Midway	4600	3/1	110	44.4	30.9	-
15B15	Baree Trail	3800	3/1	27	8.4	11.2	-
14B03	Bassoo Peak	5150	2/27	34	11.2	10.8	11.1*
13B10	Coyote Hill	4200	3/2	38	12.0	8.4	10.2
14C10	Heart Lake Trail	4800	3/2	73	22.0	21.4	-
15C10	Hoodoo Basin Pillow	6000	2/27	SP	45.5	-	-
15C01	Hoodoo Creek	5900	3/2	132	46.1	34.6	45.3*
14C05	Lolo Pass	5230	2/24	93	31.3	20.2	32.2*
15B02	Lookout	5250	3/1	103	35.6	27.1	34.8*
13C21	Lubrecht Forest No. 3	5450	2/26	26	7.0	6.9	7.4*
13C22	Lubrecht Forest No. 4	4650	2/26	11	3.0	3.6	3.9*
13C08	Lubrecht Forest No. 6	4040	2/26	13	3.8	3.8	4.6*
13B07	North Fork Jocko	6330	3/2	132	49.8	33.8	39.8
14C04	Savage Pass	6600	2/24	76	26.0	21.2	25.0*
13C02	Slide Rock Mountain	7100	3/1	40	12.7	10.0	12.6*
13C18	Spring Gulch	6000	2/25	38	10.7	10.3	10.5*
13C01	Stuart Mountain	7400	2/25	85	31.2	25.1	26.5*
14B01	TV Mountain	6800	2/24	51	16.0	15.4	14.9*

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
15B15M	Baree Trail	3800	48	7.5	2/28	6.4	6.3	-
14C05M	Lolo Pass	5250	48	10.6	2/26	3.8	6.2	6.3
13B19M	Seeley Lake	4030	48	11.9			9.9	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 3

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
3400	BLACKFOOT RIVER Bonner (near)	Apr-Sept	1170	113	717	1036
3404	CLARK FORK RIVER Milltown (above)(4)	Apr-Sept	820	102	483	802
3405	CLARK FORK RIVER Missoula (above)	Apr-Sept	1990	108	1203	1838
3410	RATTLESNAKE CREEK Missoula (at)	Apr-Sept	73.5	108	58.2	68.2
3528	BITTERROOT RIVER Missoula (at)(6)	Apr-Sept	1522	98	813	1553
3530	CLARK FORK RIVER Missoula (below)	Apr-Sept	3512	103	2016	3391
3545	CLARK FORK RIVER St. Regis (at)	Apr-Sept	4670	101	2919	4642
3890	CLARK FORK RIVER Plains (near)(8)	Apr-Sept	14470	113	9968	12793
3895	THOMPSON RIVER Thompson Falls (near)	Apr-Sept	315	104	212	302
3907	PROSPECT CREEK Thompson Falls (at)	Apr-Sept	172	104	124	165
3920	CLARK FORK RIVER Whitehorse Rapids (at)(9)	Apr-Sept	16170	112	11474	14398

(4) Difference in observed flow, Clark Fork above Missoula and Blackfoot near Bonner
(6) Difference in observed flow, Clark Fork above and below Missoula.
(8) Adjusted for storage in Flathead Lake and Hungry Horse Reservoir.
(9) Adjusted for storage in Flathead Lake, Hungry Horse and Noxon Reservoirs.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3913	Noxon Rapids	334.6	267.0	308.3	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

UPPER CLARK FORK RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

Streamflow for the April through September period is expected to be near average on the Clark Fork drainage, and a little above average in the Blackfoot River drainage. Late season irrigation supplies are expected to be near to a little above average.

The mountain snow pack is very dense for this early in the season and will help delay high elevation runoff. The present snow accumulation is about 50 percent more than a year ago and is about 12 percent above the 1948-62 average. Soils under the snow pack are wetter than usual as a result of moderate temperatures and some snow melt.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3404 CLARKS FORK RIVER ABOVE MILLTOWN	1428	778	900	1073	833	806	611	739	880	655	790	706	634	475	722	802	708	1025	1149	
STATION NO. 3400 BLACKFOOT RIVER NEAR BONNER	1312	812	1130	1295	948	1080	1126	851	1132	922	909	1338	818	775	1089	1036	719	1105	1368	

Report prepared by

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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
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"The Conservation of Water begins with the Snow Survey"

UPPER CLARK FORK RIVER BASIN

SNOW SURVEY DATA

WATERSHED 4

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13C16	Ambrose	6480	2/26	43	12.9	10.2	12.1*
13C13	Black Pine	7100	2/28	43	14.8	9.3	11.3*
13C13	Black Pine Pillow	7100	2/28	SP	13.8	9.1	-
12C05	Chessman Reservoir	6200	2/28	16	4.5	2.2	4.0
12B10	Copper Creek	5700	3/3	57	20.0	12.4	-
12B11	Cotter Mine	6250	3/3	64	22.3	13.1	-
13C09	El Dorado Mine	7800	3/3	64	19.2	10.8	17.6*
13C11	Fred Burr Pass	8000	2/28	69	24.7	15.4	23.8*
13C10	Gold Creek Lake	7200	3/3	49	14.3	8.6	13.4*
13C04	Intergaard	6450	3/1	30	8.6	5.7	7.2
13C21	Lubrecht Forest No. 3	5450	2/26	26	7.0	6.9	7.4*
13C22	Lubrecht Forest No. 4	4650	2/26	11	3.0	3.6	3.9*
13C08	Lubrecht Forest No. 6	4040	2/26	13	3.8	3.8	4.6*
12D01	Pipestone Pass	7200	3/1	19	5.0	3.6	4.5
13C12	Red Lion	7100	2/28	46	15.0	10.0	13.8*
13C03	Skalkaho Summit	7260	3/2	77	27.3	17.2	22.5*
13C02	Slide Rock Mountain	7100	3/1	40	12.7	10.0	12.6*
13C05	Southern Cross	6500	3/1	27	8.3	5.4	5.6
12C01	Stemple Pass	6600	2/27	43	12.6	7.1	9.2
13C07	Storm Lake	7780	2/27	42	12.5	7.6	11.7*
13C06	Stuart Mill	6500	3/1	26	7.2	4.8	5.9
12C02	Ten Mile Lower	6600	2/28	26	7.3	3.8	6.3
12C03	Ten Mile Middle	6800	2/27	36	10.3	6.1	9.1
12C04	Ten Mile Upper	8000	2/27	43	12.8	7.6	11.7

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13C13M	Black Pine	7100	48	10.0	2/28	8.0	5.2	-
13C15M	Georgetown Lake	6450	48	9.0	2/27	5.4	3.6	3.0
12C03M	Skalkaho Summit	7260	48	10.8	3/3	9.9	10.0	-
12C08M	Stemple Pass	6350	48	5.9	3/1	4.0	4.4	4.2

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 4

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	RACETRACK CREEK					
3241	Anaconda (near)	Apr-Sept	37.5	99		38.0
	FLINT CREEK					
3301	Boulder Creek (below)(3)	Apr-Sept	75.8	104	47.3	73.0
	MIDDLE FORK ROCK CREEK					
3320	Philipsburg (near)	Apr-Sept	85.0	109		77.8
	BLACKFOOT RIVER					
3400	Bonner (near)	Apr-Sept	1170	113	717	1036
	CLARK FORK RIVER					
3404	Milltown (above)(4)	Apr-Sept	820	102	483	802

(3) Sum, Flint Creek at Maxville and Boulder Creek at Maxville.
(4) Difference in observed flow, Clark Fork above Missoula and Blackfoot near Bonner.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3250	Georgetown Lake	31.0	20.0	26.8	23.2

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

BITTERROOT RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

Near average runoff is forecast for the April through September period. Late season irrigation supplies are expected to be near to a little above average.

The mountain snow pack is presently about 50 percent greater than a year ago and a little above average. It is quite dense for this early in the season and should help delay the high elevation runoff. Soils under the snow are generally a little drier than average at the higher elevations, increasing to above average in the lower elevations as a result of warm weather and melting snow.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION 3440 BITTERROOT RIVER NEAR DARBY	765	605	630	663	608	557	523	540	740	515	531	593	521	398	545	582	534	783	740	
STATION NO. 3475 BLODGETT CREEK NEAR CORVALLIS	51.3	45	51	46	42	40	52	45	51	42	42	47	36	39	41	45	35	48	55	

Report prepared by

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

BITTERROOT RIVER BASIN

SNOW SURVEY DATA

WATERSHED 5

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13C16	Ambrose	6480	2/26	43	12.9	10.2	12.1*
13D01	East Fork R.S.	5400	2/26	24	6.5	4.5	7.1*
13D02	Gibbons Pass	7100	2/22	66	21.2	12.6	21.0
14C05	Lolo Pass	5230	2/24	93	31.3	20.2	32.2*
14C07	Lost Horse	5940	2/28	89	31.6	20.0	30.3*
13D16	Moose Creek	6200	3/1	48	16.0	10.6	14.9
14D02	Nez Perce Camp	5680	2/27	50	16.5	9.2	12.8*
14D01	Nez Perce Pass	6570	2/27	50	16.8	10.4	14.8*
13D22	Saddle Mountain	7940	2/27	69	24.2	13.4	-
14C04	Savage Pass	6600	2/24	76	26.0	21.2	25.0*
13C03	Skalkaho Summit	7260	3/2	77	27.3	17.2	22.5*
14C08	Twin Lakes	6510	2/28	110	39.8	26.6	39.5*

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13D18M	Gibbons Pass	7100	48	7.1	2/27	4.8	5.0	5.4
14C05M	Lolo Pass	5250	48	10.6	2/26	3.8	6.2	6.3
13C03M	Skalkaho Summit	7260	48	10.8	3/3	9.9	10.0	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 5

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	WEST FORK BITTERROOT RIVER					
3425	Conner (near)(5)	Apr-Sept	190	106		179
	EAST FORK BITTERROOT RIVER					
3434	Conner (near)	Apr-Sept	179	106		169
	BITTERROOT RIVER					
3440	Darby (near)	Apr-Sept	595	102	273	582
	SKALKAHO CREEK					
3465	Hamilton (near)	Apr-Sept	60.0	99	35.1	60.6
	BLODGETT CREEK					
3475	Corvallis (near)	Apr-Sept	44.5	100	30.2	44.6
	BITTERROOT RIVER					
3528	Missoula (at)(6)	Apr-Sept	1522	98	813	1553

(5) Adjusted for storage in Painted Rocks Reservoir.
(6) Difference in observed flow, Clark Fork above and below Missoula.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3420	Painted Rocks	31.7	15.1	16.9	13.5
3445	Como	34.9	10.0	14.6	11.8

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
MARIAS, TETON and SUN RIVER BASINS
MONTANA
as of
MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack in the Sun River drainage is generally second to third highest on record in the past 20 years. In general, the near record pack is in high elevations. The snow pack is dense which will help delay high elevation runoff. The snow pack over the drainages is about 40 percent greater than a year ago and 30 percent above the 1948-62 average.

Streamflow for the April through September period is forecast for a little above average on lower elevation streams to above average on streams with higher elevation headwaters. The Sun River is forecast to produce the fifth highest runoff in the past 30 years.

Reservoir storage is generally below average but runoff will be adequate for filling.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 9786 SUN RIVER AT GIBSON DAM	741	411	712	752	499	738	748	517	669	531	555	749	436	474	616	610	387	737	702	
STATION NO. 0995 MARIAS RIVER NEAR SHELBY	1132	340	950	1013	457	928	782	600	683	510	483	698	405	380	398	651	280	937	751	

Report prepared by
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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

MARIAS, TETON and SUN RIVER BASINS

LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary

WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 6

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13A15	Badger Pass	6900	3/5	110	42.5	28.7	-
13A11	Beaver Lake	5900	3/5	71	25.2	17.5	-
12B06	Cabin Creek	5200	3/5	33	12.4	6.6	6.8*
12B09	Five-Bull	5700	3/5	29	9.2	6.1	6.1*
12A01	Freight Creek	6000	3/5	53	18.8	13.2	14.5
12B07	Goat Mountain	7000	3/1	40	12.0	9.9	10.6
13A18	Hudson Bay Divide	5800	2/28	58	20.9	15.1	-
13A05	Marias Pass	5250	2/23	67	21.3	15.8	17.3
13A16	Mineral Creek	4000	2/25	70	23.0	17.8	19.8
12B04	Wrong Creek	5700	3/5	52	20.0	13.3	14.5
12B03	Wrong Ridge	6800	3/5	66	25.7	18.5	19.6*

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13A05M	Marias Pass	5250	54	6.5	2/28	5.5	5.3	5.3

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 6

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	SUN RIVER					
0786	Gibson Dam (at)(17)	Apr-Sept	745	122	450	610
	MISSOURI RIVER					
0908	Fort Benton (at)(18)	Apr-Sept	3805	113		3319
	TWO MEDICINE CREEK					
0920	Browning (near)(19)	Apr-Sept	310	114		271
	BADGER CREEK					
0925	Browning (near)	Apr-Sept	166	116		143
	CUT BANK CREEK					
0990	Cut Bank (near)	Apr-Sept	150	106	89	142
	MARIAS RIVER					
0995	Shelby (near)(20)	Apr-Sept	710	109	435	651

(17) Adjusted for storage in Gibson Reservoir and diversions.
(18) Adjusted for storage in Canyon Ferry Reservoir.
(19) Adjusted for storage in Two-Medicine Reservoir and diversions into Two-Medicine Canal.
(20) Adjusted for storage in Two-Medicine, Four Horns, Lake Frances and Swift Reser

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0795	Gibson	105.0	21.9	50.8	58.5
0805	Pishkun	32.0	16.0	18.8	18.4
0820	Willow Creek	32.3	16.4	23.8	19.6
0930	Four Horns	19.2	11.8	12.0	10.5
0940	Swift	-	-	-	22.0
0955	Lake Frances	112.0		93.8	91.8
1013	Tiber	1,347.0	471.1	663.3	629.4

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

MISSOURI RIVER (MAIN STEM) BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow accumulation in the Big and Little Belt mountains is quite high, and a little above average along the east slopes of the Continental Divide. The snow pack is quite dense for this time of the season and will delay high elevation melt and help provide above average late season irrigation supplies.

Averaging drainages on both sides of the Missouri, snow pack is presently about 65 percent more than a year ago and 30 percent above the 1948-62 average.

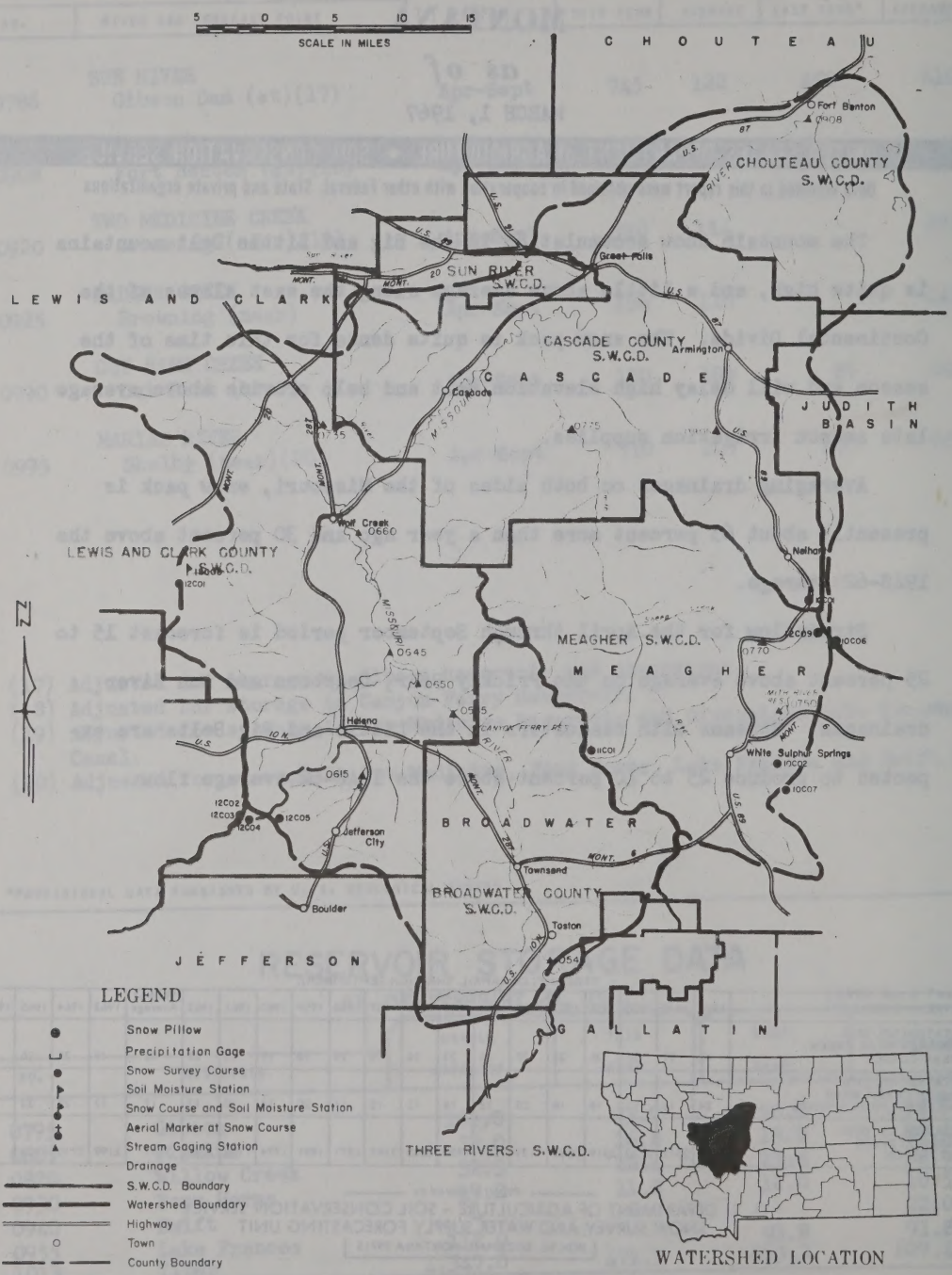
Streamflow for the April through September period is forecast 15 to 25 percent above average on the Prickly Pear, Dearborn and Sun River drainages. Streams with headwaters in the Little and Big Belts are expected to produce 25 to 40 percent above the 1948-62 average flow.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0615 PRICKLY PEAR CREEK NEAR CLANCY	42	22	27	26	22	27	16	22	16	15	24	18	19	10	23	22	19	36	26	
STATION NO. 0770 SHEEP CREEK NEAR WHITE SULPHUR SPRINGS	24	16	17	18	18	25	13	18	12	15	11	20	14	10	17	17	17	27	32	
STATION NO. 0545 MISSOURI RIVER AT TOSTON	3475	2512	2220	2319	2895	2139	1561	1730	2345	2187	1971	1991	1774	1102	2347	2147	2199	2710	3432	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

MISSOURI RIVER (MAIN STEM) BASIN



NOTE: ALL AVERAGES BASED ON

SNOW SURVEY DATA

WATERSHED 7

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
11C01	Boulder Mountain	7950	2/27	55	17.8	12.2	12.5*
12C05	Chessman Reservoir	6200	2/28	16	4.5	2.2	4.0
10C09	Deadman Creek	6450	3/1	42	14.0	8.7	-
10C07	Elk Peak	8000	2/28	54	18.8	11.2	13.3*
10C02	Grasshopper	7000	2/28	16	4.2	4.0	4.3
10C01	Kings Hill	7500	2/27	53	16.0	7.8	11.0
10C06	Spur Park	8000	3/1	67	22.8	14.7	16.0*
10C06	Spur Park Pillow	8000	3/1	SP	24.9	-	-
12C01	Stemple Pass	6600	2/27	43	12.6	7.1	9.2
12C02	Ten Mile Lower	6600	2/28	26	7.3	3.8	6.3
12C03	Ten Mile Middle	6800	2/27	36	10.3	6.1	9.1
12C04	Ten Mile Upper	8000	2/27	43	12.8	7.6	11.7

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
10C01M	Kings Hill	7420	48	11.8	3/1	4.9	8.8	8.1
12C08M	Stemple Pass	6350	48	5.9	3/1	4.0	4.4	4.2

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 7

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	MISSOURI RIVER					
0545	Toston (at)(16)	Apr-Sept	2380	111	1119	2147
	PRICKLY PEAR CREEK					
0615	Clancy (near)	Apr-Sept	25.5	116		22.0
	SHEEP CREEK					
0770	White Sulphur Spgs. (nr)	Apr-Sept	23.3	135	19.1	16.5
	SUN RIVER					
0786	Gibson Dam (at)(17)	Apr-Sept	745	122	450	610
	MISSOURI RIVER					
0908	Fort Benton (at)(18)	Apr-Sept	3805	113		3319

(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
(17) Adjusted for storage in Gibson Reservoir and diversions.
(18) Adjusted for storage in Canyon Ferry Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0585	Canyon Ferry	2043.0	1166.0	1551.0	1514.9
0645	Lake Helena	10.4	10.4	10.7	7.8
0650	Hauser Lk. & Lk. Helena	61.9	61.9	62.4	53.9
0660	Holter Lake	81.9	81.1	81.7	50.7
0750	Smith River	10.7		7.4	5.6

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

JEFFERSON RIVER and TRIBUTARY BASINS

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

Streamflow for the April through September period is forecast to be near to a little above average on most streams, except for above average flows in the upper Red Rock area. Late season irrigation water supplies are expected to be near to a little above average.

In general, high elevation snow pack is a little above average, decreasing to a little below average at lower elevations. The mountain snow pack is quite dense for this early in the season and will help delay the high elevation runoff. The mountain snow accumulation is presently 50 to 65 percent greater than a year ago and is about 10 to 15 percent above the 1948-62 average. Above average conditions are present in the upper Red Rock area.

Inflow to Clark Canyon Reservoir is expected to be a little above average. Soils under the snow pack are generally a little drier than usual and will slightly decrease the spring runoff.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0215 RED ROCK RIVER NEAR MONIDA	81	78	100	70	127	81	58	71	60	105	93	54	55	36	110	78	60	110	136	
STATION NO. 0255 BIG HOLE RIVER NEAR MELROSE	1159	749	778	861	808	745	541	592	842	720	714	645	556	397	671	718	681	849	1166	
STATION NO. 0330 BOULDER RIVER NEAR BOULDER	136	65	81	92	85	84	49	73	76	67	82	68	73	46	70	76	81	108	139	

Report prepared by

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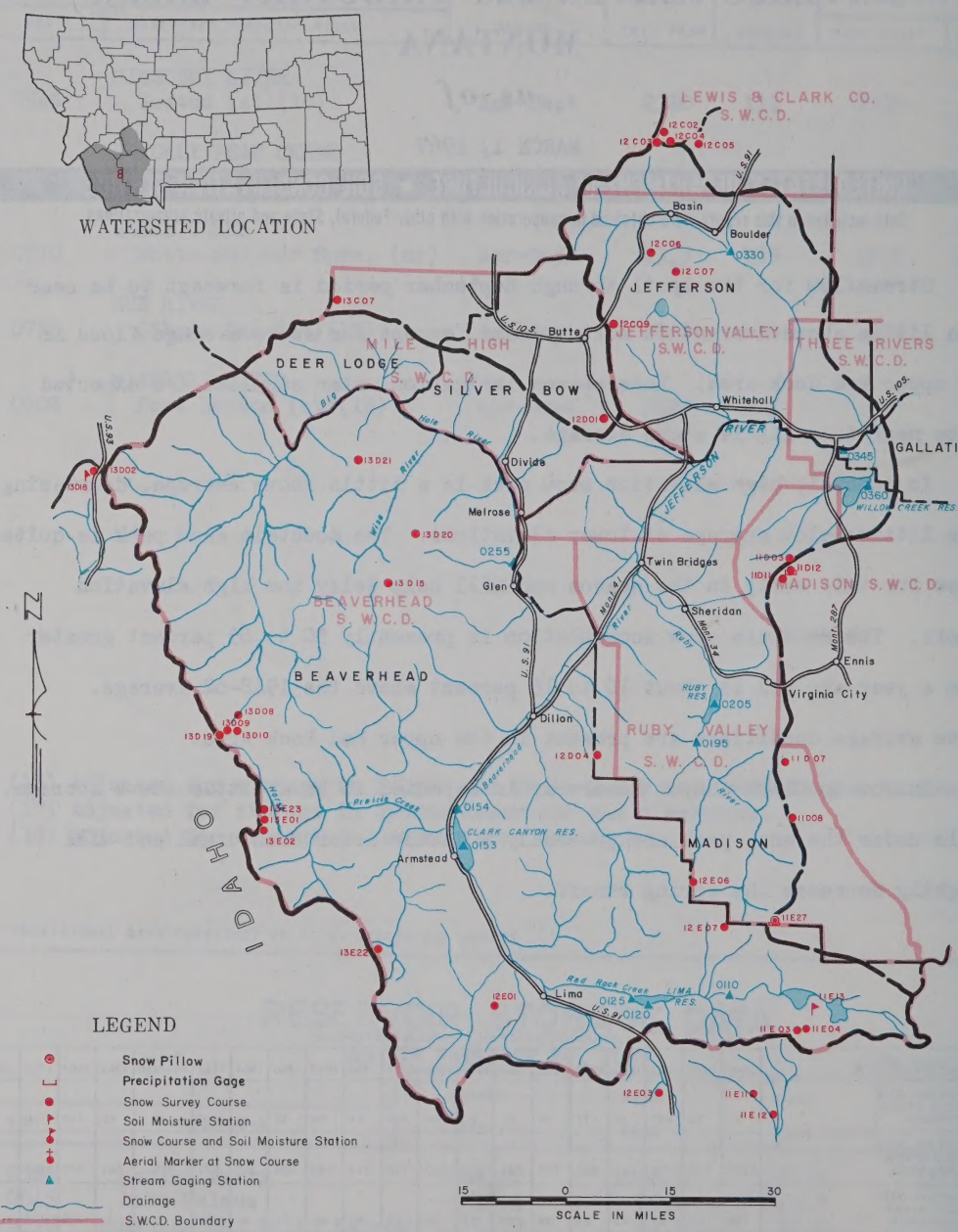
JEFFERSON RIVER and TRIBUTARY BASINS



SNOW SURVEY DATA

WATERSHED 8

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13D20	Abundance Lake	8800	2/23	56	17.0	13.6	-
12C07	Berry Meadow	7300				5.1	6.5*
13D10	Bloody Dick	7600	2/28	35	10.6	6.2	9.6
11D07	Call Road	8050	2/23	37	10.0	7.4	-
12D04	Carter Creek	7400	No measurement			2.5	-
12C05	Chessman Reservoir	6200	2/28	16	4.5	2.2	4.0
11D08	Clover Meadow	8600	2/23	49	14.0	11.0	-
13E22	Dad Creek Lake	8400	2/23	44	12.1	-	-
13D19	Darkhorse Lake	8600	2/23	68	23.8	16.4	-
12E07	Divide	7900	2/23	37	9.8	7.0	-
13D15	Elk Horn Springs	7800	2/27	30	8.1	5.9	8.8
13D21	Foolhen	8280	2/23	50	15.4	10.7	-
11D12	Four Mile	6900	3/2	26	6.8	5.3	-
13D02	Gibbons Pass	7100	2/22	66	21.2	12.6	21.0
13D09	Gold Stone	8100	2/28	44	13.8	8.2	12.4
13D08	Jahnke Creek	7340	2/28	32	8.9	5.5	8.8
11E04	Lakeview Canyon	6930	2/28	40	13.0	9.4	9.6
11E03	Lakeview Ridge	7400	2/28	37	11.8	7.7	8.1
13E01	Lemhi Pass	7480	2/27	29	7.2	5.4	7.1
13E23	Lemhi Ridge	8100	2/27	31	8.0	-	-
11D11	Lower Twin	7900	3/2	51	16.6	13.6	-
11D03	North Meadow	7500	3/2	26	6.8	4.9	7.3*
12E06	Notch	8500	2/23	42	11.9	12.1	-
12C06	Picnic Grounds	6500	2/28	20	5.0	2.6	4.2*
12D01	Pipestone Pass	7200	3/1	19	5.0	3.6	4.5
13D22	Saddle Mountain	7940	2/27	69	24.2	13.4	-
13C07	Storm Lake	7780	2/27	42	12.5	7.6	11.7*
12C02	Ten Mile Lower	6600	2/28	26	7.3	3.8	6.3
12C03	Ten Mile Middle	6800	2/27	36	10.3	6.1	9.1
12C04	Ten Mile Upper	8000	2/27	43	12.8	7.6	11.7
13E02	Trail Creek	7090	2/27	29	7.1	4.6	6.4
12E01	White Pine Ridge	8850	2/23	18	3.4	3.7	4.4

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13D18M	Gibbons Pass	7100	48	7.1	2/27	4.8	5.0	5.4
11E13M	Lakeview	6700	48	15.3	2/28	6.5	6.0	8.9

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 8

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
0110	RED ROCK RIVER Kennedy Ranch (at)	Apr-Sept	89.5	125	50.2	71.7
0125	RED ROCK RIVER Monida (near)(11)	Apr-Sept	94.0	120	55.1	78.4
0195	RUBY RIVER Alder (near)	Apr-Sept	82.0	103	60.6	79.6
0255	BIG HOLE RIVER Melrose (near)	Apr-Sept	710	99	300	718
0260	BIRCH CREEK Glen (near)	Apr-Sept	13.5	110		12.3
0330	BOULDER RIVER Boulder (near)	Apr-Sept	86.0	113	53.2	76.3
0345	JEFFERSON RIVER Sappington (at)(12)	Apr-Sept	1050	108	331	974

(11) Adjusted for storage in Lima Reservoir.
(12) Adjusted for storage in Clark Canyon Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0120	Lima	84.0	14.0	45.9	26.1
0153	Clark Canyon	328.9	107.9	151.1	-
0205	Ruby	38.8		-	23.0

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

MADISON and GALLATIN RIVER BASINS

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The high elevation snow pack is above average, decreasing to near or below average at lower elevations. Streamflow during the April through September period is forecast to be well above average on the Gallatin and tributaries, and 5 to 15 percent above average on Madison River tributaries. The mountain snow pack is quite dense for this time of year and will help delay the high elevation runoff. Late season irrigation water supplies are expected to be above average on the Gallatin River and tributaries, and near to a little above average from streams on the east side of the Madison River. Streamflow from the Tobacco Root mountains will be near to a little below average.

In general, soils under the mountain snow pack are near average to a little drier than usual, while lower elevation soils are generally a little above average as a result of warm weather and melting snow.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0385 MADISON RIVER NEAR GRAYLING	406	424	444	468	563	434	420	345	489	454	359	366	327	329	468	420	430	474	577	
STATION NO. 0435 GALLATIN RIVER NEAR GALLATIN GATEWAY	566	393	454	399	596	404	365	350	499	469	384	507	416	331	577	447	455	551	649	
STATION NO. 0485 BRIDGER CREEK NEAR BOZEMAN	42	12	19	19	28	27	12	17	19	14	15	24	21	9	21	20	28	24	31	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

MADISON and GALLATIN RIVER BASINS

SNOW SURVEY DATA

WATERSHED 9

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
10D14	Arch Falls	7350	2/27	42	12.2	6.4	9.5*
11D09	Bear Basin	8150	3/2	61	19.7	12.0	16.3*
10D15	Bridger Bowl Pillow	7250	2/28	SP	20.4	16.2	-
11D07	Call Road	8050	2/23	37	10.0	7.4	-
10E03	Canyon	7750	2/26	55	16.8	9.8	13.1
11E29	Carrot Basin Pillow	9000	2/20	SP	30.1	-	-
11D08	Clover Meadow	8600	2/23	49	14.0	11.0	-
10D04	Devil's Slide	8100	2/27	67	21.4	12.2	17.4
11D12	Four Mile	6900	3/2	26	6.8	5.3	-
11E25	Freezeout Lake	7200	2/23	36	9.8	-	-
11E26	Freezeout Mountain	8250	2/23	56	17.0	-	-
11E05	Hebgen Dam	6550	2/25	39	12.3	6.7	10.8
10D03	Hood Meadow	6600	2/27	33	9.8	4.6	7.6
11D05	Jack Creek	7500	3/1	20	5.0	3.0	5.0*
11E22	Lake Creek	6100	2/23	29	8.4	-	-
10D13	Lick Creek Pillow	6860	2/28	SP	11.2	5.5	-
11D10	Little Park	7400	3/2	50	15.6	8.5	11.4*
11D11	Lower Twin	7900	3/2	51	16.6	13.6	-
10D18	Maynard Creek Pillow	6210	2/28	SP	11.4	-	-
11E23	Meridian Creek	7000	2/24	33	8.8	-	-
10D01	New World	6700	2/25	39	11.9	5.6	8.6
10E02	Norris Basin	7500	3/1	41	12.4	7.1	9.0*
11D03	North Meadow	7500	3/2	26	6.8	4.9	7.3*
11E21	Potomageton Park	7150	2/24	51	16.1	9.5	-
10D10	Sacajawea	6550	2/28	38	13.4	9.0	11.1*
11E20	Sentinel Creek	8300	2/24	78	26.1	14.6	-
10D16	Shower Falls Pillow	8100	2/27	SP	22.0	15.0	-
11D13	Taylor Peaks Pillow	8500	2/23	SP	18.0	-	-
11E24	Tepee Creek	8000	2/24	46	14.0	-	-
10E07	Thumb Divide	7900	2/28	66	22.3	17.1	20.0
11E06	Twenty-One Mile	7150	2/26	60	21.5	12.7	15.8
11E07	West Yellowstone	6700	2/26	47	14.7	7.0	10.6
11E07	West Yellowstone Pillow	6700	2/28	SP	10.9	-	-

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
10D11M	Battle Ridge	6020	48	17.6	3/1	12.9	13.0	12.9
10D15M	Bridger Bowl	7250	48	15.8	2/28	15.9	15.7	-
11D02M	College Site	4856	54	14.5	2/24	12.5	13.5	9.7
10D13M	Lick Creek	6860	48	18.8	2/28	18.6	12.0	-
10D04M	Red Bluff	4800	40	4.7	3/1	2.5	2.4	2.3
11E06M	Twenty-One Mile	7150	48	10.0	2/28	2.5	3.0	2.8
11E07M	West Yellowstone	6700	48	6.5	2/28	2.5	-	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 9

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
0375	MADISON RIVER West Yellowstone (near)	Apr-Sept	235	113	195	208
0385	MADISON RIVER Grayling (near)(13)	Apr-Sept	484	115	378	420
0410	MADISON RIVER McAllister (near)(14)	Apr-Sept	818	114	620	718
0435	GALLATIN RIVER Gateway (near)	Apr-Sept	570	127	389	447
0485	BRIDGER CREEK Bozeman (near)	Apr-Sept	26.5	133	17.6	19.9
0500	HYALITE CREEK Bozeman (near)(15)	Apr-Sept	47.5	133		35.6
0525	GALLATIN RIVER Logan (at)	Apr-Sept	620	133	320	467
0545	MISSOURI RIVER Toston (at)(16)	Apr-Sept	2380	111	1119	2147

(13) Adjusted for storage in Hebgen Lake.
(14) Adjusted for storage in Hebgen and Ennis Lakes.
(15) Adjusted for storage in Middle Creek Reservoir.
(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0380	Hebgen Lake	377.5	170.4	222.3	179.1
0405	Ennis Lake	41.0	39.7	38.6	37.3
0495	Middle Creek	8.0	3.0	1.8	3.6

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
JUDITH and MUSSELSHELL RIVER BASINS
MONTANA
as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The snow pack is heavy in the high elevations of the Little Belt, Big Belt and Castle mountains, decreasing to near or below average in the lower elevations. Streamflow is forecast to be well above average for the April through September period. Late season irrigation water supplies are expected to be near to a little above average. The snow pack is quite dense for this time of year and will help delay high elevation runoff.

The mountain snow accumulation is about 65 percent greater than a year ago and 30 percent above the 1948-62 average.

Soils under the snow are generally a little drier than usual, while lower elevation soils are a little above average as a result of warm weather and melting snow.

Reservoir storage has not yet been reported.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 1185 SOUTH FORK MUSSELSHELL RIVER ABOVE MARTINSDALE	97	49	68	54	79	55	27	25	47	56	26	57	32	11	50	49	45	56	74	
STATION NO. 1098 SOUTH FORK JUDITH RIVER NEAR UTICA												13	9	3	14	12	10	19	17	

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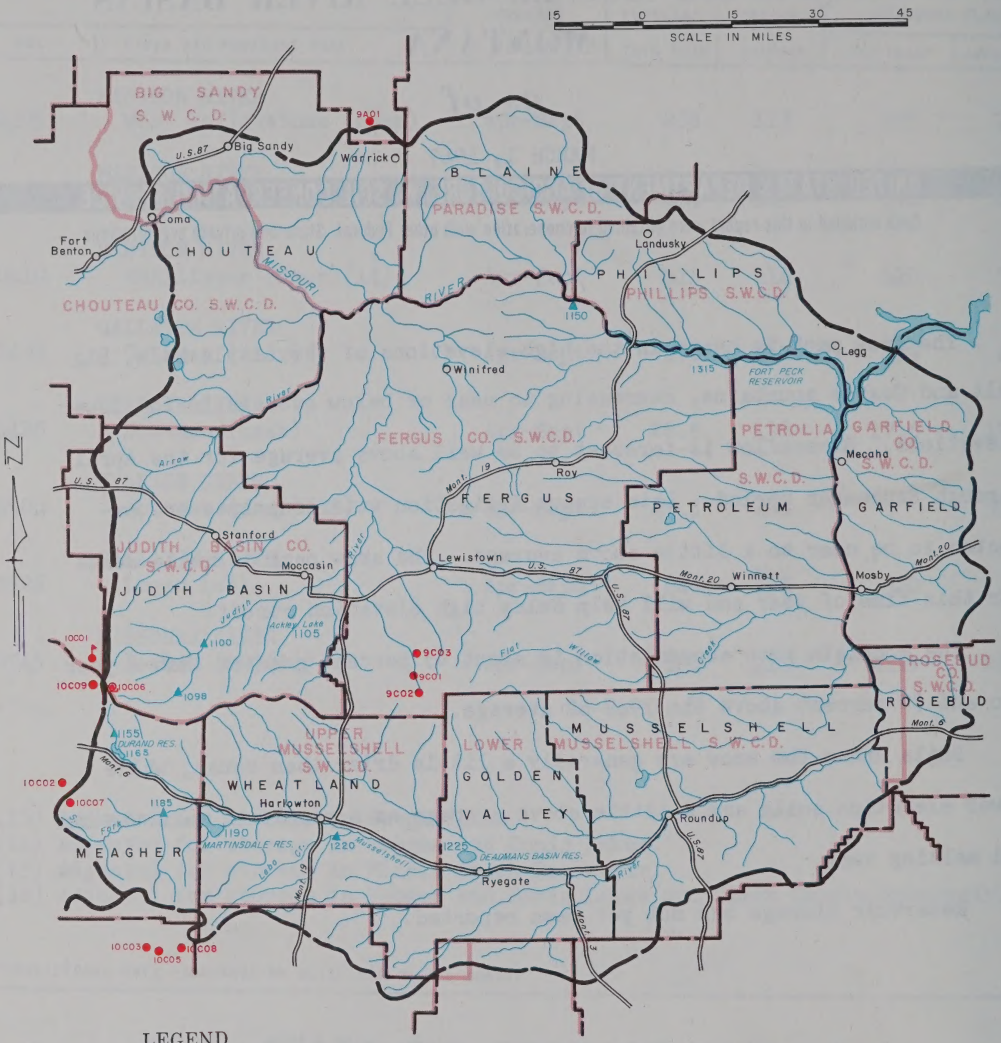
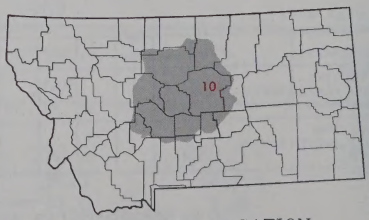
"The Conservation of Water begins with the Snow Survey"

JUDITH and MUSSELSHELL RIVER BASINS



LEGEND

- Snow Pillow
- Precipitation Gage
- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 10

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
9C02	Avalanche	7100	3/2	75	24.0	-	-
10C05	Bald Ridge	7500	3/1	34	10.6	7.4	9.2*
9C01	Crystal Lake	6100	3/2	47	14.4	8.1	10.5
10C09	Deadman Creek	6450	3/1	42	14.0	8.7	-
10C07	Elk Peak	8000	2/28	54	18.8	11.2	13.3*
10C02	Grasshopper	7000	2/28	16	4.2	4.0	4.3
10C01	Kings Hill	7500	2/27	53	16.0	7.8	11.0
10C03	Porcupine R.S.	6500	3/1	22	6.2	4.5	6.3
9C03	Rock Creek	5600	3/2	35	10.1	-	-
9A01	Rocky Boy	5200	2/25	23	6.6	3.0	4.2
10C08	South Fork Shields	8100	3/1	63	23.4	16.1	-
10C06	Spur Park	8000	3/1	67	22.8	14.7	16.0*
10C06	Spur Park Pillow	8000	3/1	SP	24.9	-	-

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
10C01M	Kings Hill	7420	48	11.8	3/1	4.9	8.8	8.1

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 10

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	JUDITH RIVER					
1100	Utica (near)	Apr-Sept	43.5	130		33.5
	MISSOURI RIVER					
1150	Zortman (near)(21)	Apr-Sept	5100	113		4508
	NORTH FORK MUSSELSHELL R.					
1155	Delpine (near)	Apr-Sept	7.7	128	4.0	6.0
	SOUTH FORK MUSSELSHELL R.					
1185	Martinsdale (above)	Apr-Sept	58.0	119	44.2	48.8

(21) Adjusted for storage in Canyon Ferry and Tiber Reservoirs.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
1105	Ackley Lake	5.8		-	3.5
1165	Durand	7.0		5.4	4.2
1190	Martinsdale	23.1		11.8	8.0
1225	Deadman's Basin	72.2		67.4	39.8

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

UPPER YELLOWSTONE RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The high elevation snow pack in the Absarokee and Beartooth Ranges is well above average, decreasing to near or a little below average in the lower elevations. Over the entire drainage, snow accumulation is about 75 percent greater than a year ago and 30 percent above the 1948-62 average. The snow pack is quite dense for this time of year and will help delay high elevation melt.

Streamflow is forecast above average on all drainages, with higher percentage runoff from streams with headwaters in the Absarokee-Beartooth area. Late season irrigation water supplies are expected to be above average on the Boulder and Stillwater Rivers and Rock Creek, and near average on other tributary streams.

Moisture in soils under the snow pack is generally near average, except for above average conditions in lower elevations, as a result of warm weather and melting snow.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 1935 SHIELDS RIVER AT CLYDE PARK	217	113	116	94	162	130	65	72	97	77	50	106	63	36	86	99	101	133	162	
STATION NO. 1925 YELLOWSTONE RIVER NEAR LIVINGSTON	2480	2216	2427	2474	2417	1820	2232	1621	2689	2272	1630	2098	1527	1440	2562	2127	2128	2392	2982	
STATION NO. 2075 CLARK FORK YELLOWSTONE RIVER AT CHANCE	588	564	713	757	576	519	600	419	716	715	487	648	386	442	622	583	593	602	763	

Report prepared by
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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
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"The Conservation of Water begins with the Snow Survey"

UPPER YELLOWSTONE RIVER BASIN

SNOW SURVEY DATA

WATERSHED 11

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
10C05	Bald Ridge	7500	3/1	34	10.6	7.4	9.2*
10D15	Bridger Bowl Pillow	7250	2/28	SP	20.4	16.2	-
9D01	Camp Senia	7890	3/3	34	7.7	2.1	4.8*
10E03	Canyon	7750	2/26	55	16.8	9.8	13.1
9D07	Cooke Station	8150	3/1	62	20.5	11.6	-
10D05	Crevice Mountain	8400	2/28	37	10.0	6.0	7.5
10D04	Devil's Slide	8100	2/27	67	21.4	12.2	17.4
10E06	East Entrance	7000	2/27	34	9.0	7.3	10.4*
9D06	Fisher Creek	9100	3/1	106	39.8	25.3	-
9D06	Fisher Creek Pillow	9100	3/1	SP	37.8	-	-
9D05	Grizzly Peak	8400	3/1	57	14.6	6.6	10.1*
10D06	Independence	8000	2/24	65	22.7	11.2	15.6*
10E04	Lake Camp	7850	2/28	40	11.2	5.5	9.0
9E01	Lodgepole	8200	3/1	39	11.4	5.5	8.6*
10E01	Lupine Creek	7300	3/3	44	13.5	7.5	9.5
10D12	Monument Peak	9000	2/24	84	29.2	15.2	18.1*
10E02	Norris Basin	7500	3/1	41	12.4	7.1	9.0*
10D07	Northeast Entrance	7400	3/6	39	11.0	5.0	7.5
10D07	Northeast Entrance Pillow	7350	3/6	SP	10.2	-	-
10C03	Porcupine R.S.	6500	3/1	22	6.2	4.5	6.3
10D10	Sacajawea	6550	2/28	38	13.4	9.0	11.1*
10D16	Shower Falls Pillow	8100	2/27	SP	22.0	14.6	-
10C08	South Fork Shields	8100	3/1	63	23.4	16.1	-
10E05	Sylvan Pass	7100	2/27	48	12.0	8.7	12.6
10E07	Thumb Divide	7900	2/28	66	22.3	17.1	20.0
9D04	Timberline Creek	8850	3/3	60	17.8	6.8	10.9*
9D02	West Rosebud	7500	2/28	44	15.0	-	-
9D08	White Mill	8700	3/1	82	29.5	New Course	

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
10D11M	Battle Ridge	6020	48	17.6	3/1	12.9	13.0	12.9
10D15M	Bridger Bowl	7250	48	15.8	2/28	15.9	15.7	-
10D07M	Northeast Entrance	7350	48	9.4				

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 11

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
1915	YELLOWSTONE RIVER Corwin Springs (at)	Apr-Sept	2120	113	1494	1877
1925	YELLOWSTONE RIVER Livingston (near)	Apr-Sept	2400	113	1628	2127
1935	SHIELDS RIVER Clyde Park (at)	Apr-Sept	112	113		99.0
2000	BOULDER RIVER Big Timber (at)	Apr-Sept	415	121	229	343
2050	STILLWATER RIVER Absarokee (near)(25)	Apr-Sept	670	121		552
2075	CLARKS FORK RIVER Chance (at)	Apr-Sept	655	112	431	583
2085	CLARKS FORK RIVER Edgar (at)	Apr-Sept	675	111	430	609
2095	ROCK CREEK Red Lodge (near)	Apr-Sept	128	124	91.4	103
2145	YELLOWSTONE RIVER Billings (at)	Apr-Sept	4500	115	2938	3913

(25) Adjusted for storage in Mystic Lake.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
2040	Mystic Lake	20.8	7.7	10.5	7.8
2120	Cooney	27.5	15.8	17.9	11.1

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

MILK RIVER BASIN

MONTANA

as of

MARCH 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

Adequate irrigation water supplies are forecast for the Milk River area. Streamflow in the St. Mary drainage is forecast above average and will provide adequate runoff to supply the St. Mary diversion. The flow of the Milk River, including the diversion from St. Mary, is expected to be a little less than average. Combined streamflow and above average reservoir storage will provide near average irrigation supplies.

The snow accumulation in the mountain headwaters area is about 40 percent more than a year ago, and 25 percent above the 1948-62 average.

In the Cypress Hills area, snow pack is about 30 percent greater than a year ago and 55 percent above average.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

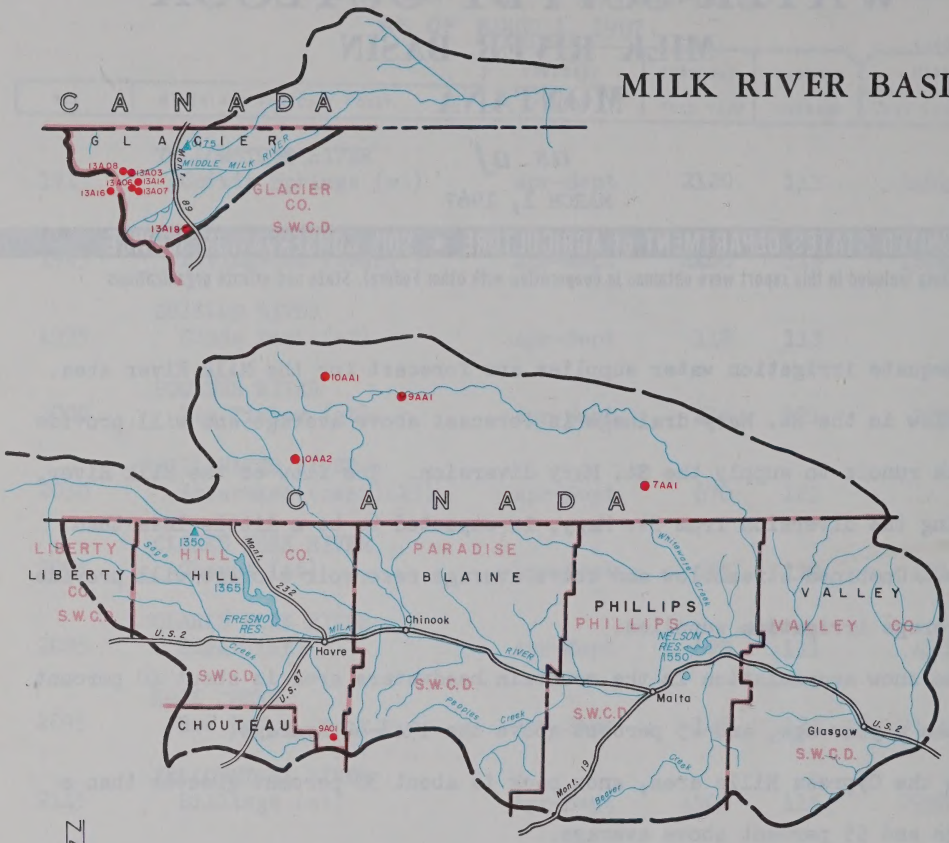
STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
MILK RIVER AT EASTERN CROSSING	304	190	223	312	227	359	232	255	255	230	259	275	217	209	212	250	227	280	332	
RESERVOIR STORAGE SUM FRESNO AND NELSON ON APRIL 1	110	108	24	116	182	115	124	124	132	160	111	129	184	74	53	116	92	67	118	
SUM STREAMFLOW AND RESERVOIR STORAGE	414	298	247	428	409	474	356	279	387	390	370	404	401	283	265	366	319	347	450	

Report prepared by

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

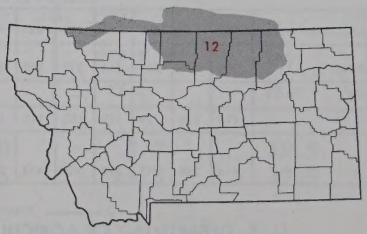
"The Conservation of Water begins with the Snow Survey"

MILK RIVER BASIN



LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S. W. C. D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 12

AS OF MARCH 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
13A18	Hudson Bay Divide	5800	2/28	58	20.9	15.1	-
13A05	Marias Pass	5250	2/23	67	21.3	15.8	17.3
13A16	Mineral Creek	4000	2/25	70	23.0	17.8	19.8
9A01	Rocky Boy	5200	2/25	23	6.6	3.0	4.2
	CYPRESS HILLS - CANADA						
10AA2	Cress Day B	3450	2/25	11	2.6	2.3	1.3*
9AA1	Cypress Park C	4000	2/27	21	5.3	4.2	4.1*
10AA1	Elkwater Lake A	4100	2/25	12	2.8	1.8	2.0*
7AA1	Val Marie D	2700	2/27	11	2.4	1.9	1.1*

SOIL MOISTURE DATA

AS OF MARCH 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
13A05M	Marias Pass	5250	54	6.5	2/28	5.5	5.3	5.3

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 12

AS OF MARCH 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	ST. MARY RIVER					
0175	Babb (near)(30)	Apr-Sept	610	124		491
	MILK RIVER					
1350	Eastern Crossing (at)	Mar-Sept	253	93	284	272

(30) Adjusted for storage in Lake Sherburne.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
1365	Fresno	127.2	84.4	81.5	58.6
1550	Nelson	66.8	49.0	48.7	35.4

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).